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US renewables' credit outlook improves with increased financial and political tailwinds

By Vivane Raj & Sean Lau

- **COVID-19 pandemic hits the credit quality of US fossil fuels sector harder than that of renewables, which recovered quickly**
- **Pro-renewables political factors coupled with increased investor demand for green energy projects have reduced borrowing costs for renewable companies**
- **The decreasing trend in NUS-CRI Forward PD time series is consistent with the significant tailwinds experienced by the renewables sector**

While COVID-19 has been devastating to the demand of the energy sector overall, certain energy sources have ended up better off than others. The NUS-CRI July and December 2020 briefs explored the impact of pandemic-induced lockdowns on the credit quality of the oil & gas and related industries. We will now cover the outlook of the US renewable energy market which has fared better than its fossil fuel[1] counterparts over the past year. Compared to the drop in fossil fuels' consumption, renewable energy has experienced growth in 2020. Looking forward, a political landscape favouring an accelerated transition to green energy and increased investor demand in the renewable energy bond markets are likely catalysts for the improving credit outlook for US renewables industry.

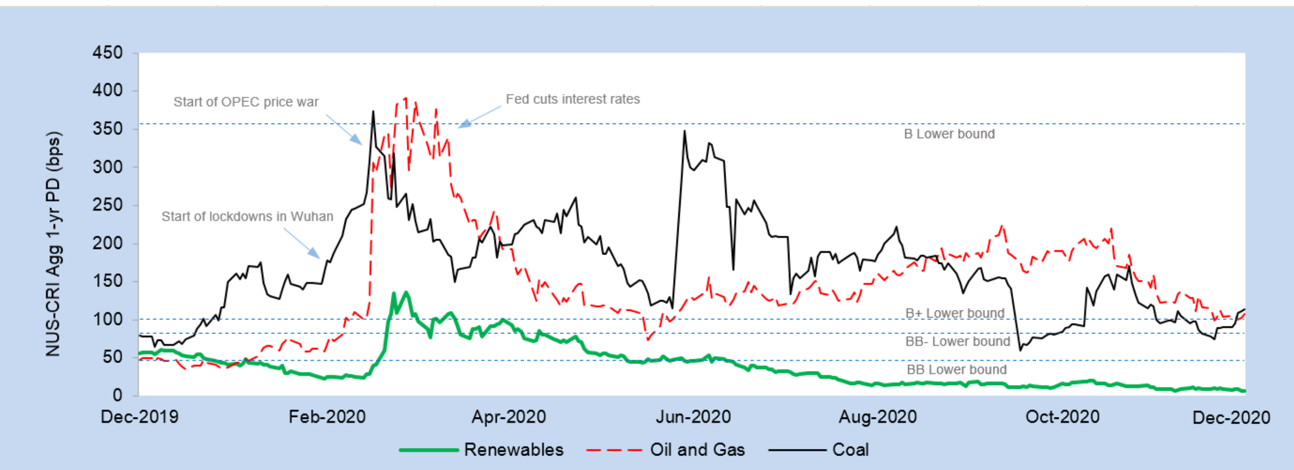

Figure 1: NUS-CRI Agg 1-Year PD of the US renewable, oil & gas and coal companies with reference to PDiR2.0[2] bounds. *Source: NUS-CRI*

The US energy market suffered significant damage as the pandemic-induced economic shutdowns triggered a drastic drop in energy demand. Figure 1 shows that the NUS-CRI Aggregate (median) 1-year Probability of Default (Agg PD) of US–listed renewable, oil & gas and coal companies spiked in March, corresponding to the slowdown in economic activity at the beginning of the pandemic in the US. The US Federal Reserve (Fed) quickly responded by lowering the Federal Funds Rate from 1.25% to 0.25% and providing stimulus to the bond market. The energy demand hit a low of 6,517tn British Thermal Units (BTUs) in April 2020, a significant drop as compared to the 7,661tn BTUs consumed in April 2019. As the economy found its footing and lockdown

[1] Fossil fuels include Coal, Natural Gas and Petroleum sources, as per IEA.
[2] The Probability of Default implied Rating version 2.0 (PDiR2.0) provides a more familiar interpretation through mapping the NUS-CRI 1-year PDs to the S&P letter grades. The method targets S&P's historical credit rating migration experience exhibited by its global corporate rating pool instead of relying solely on the reported default rates.

measures were lifted, energy demand gradually recovered to 8,023tn BTUs in August 2020, close to the 8,551tn BTUs consumed in August 2019.

Investments in green energy have also been on the rise as of late. Green bonds have increased in popularity in the past few years and strong investor interests have led to lower yields for green bonds compared to non-green issuances. While the aggregate PD of all energy sources have trended downwards, Figure 1 still shows a significant spread between the PD for fossil fuels and their green counterparts. According to Goldman Sachs, the average cost of capital for renewable project financing is around 3 to 5% compared to that of oil & gas investments, which varies from 10 to 20% currently. This is a substantial decrease from 5.25% to 7% for green energies in 2018. Overall, the credit strain on renewables will ease which could contribute to the fall in PD over the year.

The fossil fuel industry PD is still elevated compared to the start of the year. This can be explained by demand shocks due to the pandemic and the oil price war which depressed commodity prices. The price of WTI spot crude has risen to around USD 40 over the second half of the year, from a low of USD 11.26 in April. These prices are much lower than the USD 60 to 65 breakeven price of shale oil production. Coal producers similarly had a hard time producing a projected 63.6mn short tons of coal in 2020, a 32% drop when compared to the previous year, as the price of US coal bottomed out at USD 34.05 in March. These shocks have put a strain on the credit health of fossil fuel companies, as they struggle to remain operational amidst a sluggish global demand for energy.

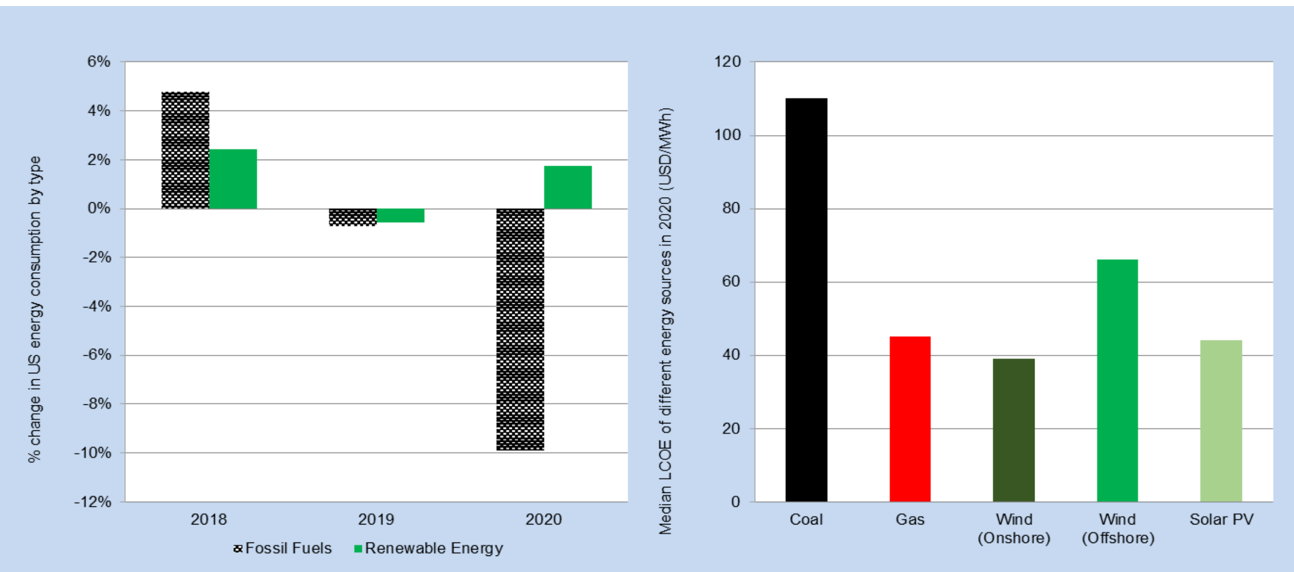

Figure 2a (LHS): Percentage change in fossil fuel and renewable energy consumption from 2018 to 2020. Figure 2b (RHS): Levelized cost of energy for different energy sources in 2020. *Source: IEA.*

Figure 2a shows that renewable energy has experienced an increase in consumption in the first eight months of 2020, when compared to the same time frame in 2019. In comparison, fossil fuels have suffered a dramatic drop of almost 10% during that time. Moreover, the cost of producing energy is comparatively lower for renewables as compared to dirtier energy sources, as shown in Figure 2b. The cost of coal of over USD 100 per MWh significantly exceeds the cost of onshore wind and solar sources, which are less than USD 50 per MWh each. These factors are good indicators of the future growth prospects for green energy, as clean energy producers are generating a greater proportion of the total energy mix in recent years, a trend which is going to continue in the near future. The demand for renewables will remain strong heading into the next year, with 21% of total energy generation in the US to come from clean sources, compared to 20% in 2020 and 18% in 2019.

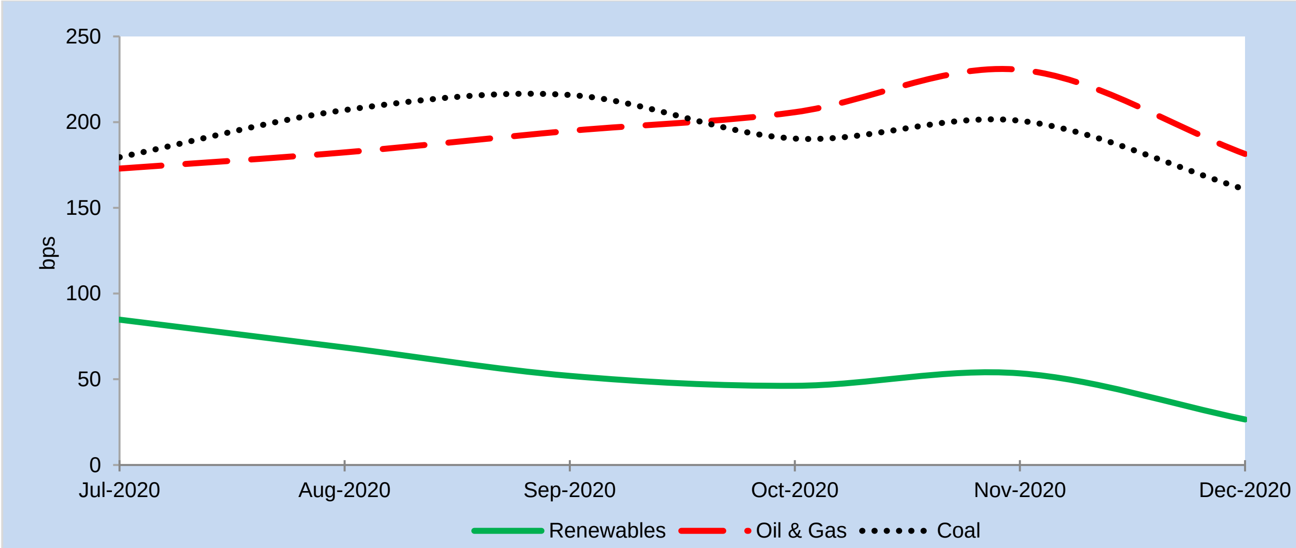

Figure 3: NUS-CRI Agg Forward 1-year PD time series for energy producers based on different historical months looking to Dec 2021. *Source: NUS-CRI*

Concurrently, the credit outlook for renewable energy companies has improved over the past few months. The Forward 1-year PD time series shown in Figure 3 exhibits renewable energies, oil & gas and coal firms' credit outlook looking to Dec 2021 based on information from Jul 2020 to Dec 2020. As time draws closer to Dec 2020, the Forward PD[3] of renewable energy companies has seen a decreasing trend, indicating an improved credit outlook. For instance, the 17-month Forward PD for renewable energy companies in July 2020 is 85bps. This means that the 1-year PD of a renewable energy company, conditional on its survival till Dec 2021, was expected to be 85bps. Meanwhile, the 12-month Forward PD at December 2020 of 27bps shows a significant improvement in the credit outlook of renewables.

Going forward, the overall energy market is projected to rebound in 2021, with a 1.3% uptick in total consumption. Since the growth outlook of renewables is favourable, the initial capital expenditures during expansion is likely to be significant. A bigger wind and solar build-out will require costly long-distance transmission lines to get the power from resource areas to population centres. Clean energy projects will account for over 25% of the total energy supply capex, overtaking that of oil & gas investments. Increased leverage from this rapid expansion may call into question the credit health of renewable energy companies, especially if there are further demand shocks in the future.

At the same time, the transition of the US energy mix toward renewable and sustainable energies will speed up as the presidency is handed over to the Biden Administration. The incoming administration plans to re-join the Paris Accord and inject USD 2tn into the clean power sector to decarbonize the energy market by 2035. Furthermore, president– elect Biden promised to remove current subsidies for oil & gas and coal companies to channel funds towards the green energy sector. Nevertheless, a divided Congress may block this initiative. On the 21st of December, the US Congress approved a USD 900bn stimulus package extending a lifeline to faltering companies. The stimulus also includes USD 4bn for renewable energy development, USD 1.7bn for households to install renewable energy infrastructure, and increased tax credits for wind and solar projects. The increased funding will support the country's energy demand, through encouraging spending in the economy. This will accelerate economic recovery in the industry and benefit energy producers, highlighting a positive credit outlook. Even fossil fuel companies are riding the "green wave", with major oil producers such as Shell and Exxon investing in renewables to transition to a cleaner business model.

[3] The Forward PD estimates the credit risk of a company in a future period, which can be interpreted similarly to a forward interest rate. For example, the 6-month Forward 1-year PD is the probability that the firm defaults during the period from 6 months onwards to 1 year plus 6 months, conditional on the firm's survival in the next 6 months.

Credit News

Bond boom comes to America's colleges and universities

Dec 26. Educational institutions in America have increased their funding from the bond markets to USD 41.3bn this year, as they take advantage of the low-interest-rate environment. For example, Woffenberg College in South Carolina was able to reduce its annual financing costs by USD 100,000 annually by cutting the yields offered on their bonds. Investors are also keen on the opportunity to invest in the positive yielding, high-grade, and long-maturity bonds that colleges and universities are providing. These issuances will provide lifelines to schools that are facing decreasing enrollment and revenue streams. (WSJ)

More APAC firms tap loans linking rates to sustainable goals

Dec 24. There is an increasing amount of loans from the Asia Pacific tapping onto the Sustainable Finance agenda. Post pandemic, this is one of the few silver linings in the corporate loan market. Generally, loans in the region have plunged 30% this year as banks tightened lending conditions. With the surge in demand for sustainability-related bonds, the issuances from borrowers who can fulfill these targets have increased. Interest in sustainability-related loans continues to rise. In 2020, the number of sustainability-related loans is the same as last year as firms focused on financing their operations. (Bloomberg)

China debt fears grow amid wave of corporate defaults

Dec 23. In the past, stakeholders looked to the safety endowed by the implicit government guarantee provided to State-Owned Enterprises. Today, that very assumption is put to the question as the year recorded numerous defaults. This raised worries about an impending debt crisis that would pull back China's recovery thus far. BNP Paribas economist commented that, in the coming year, the central bank runs the potential risk of tightening up or deleveraging too early. Moving into 2021, the default witnessed in 2020 marks the start of the repricing of Chinese SOEs' debt and greater differentiation between quality and uncompetitive firms. (Nikkei Asia)

Fed backstop masks rising risks in America's corporate debt market

Dec 22. US companies have borrowed a record USD 2.5tn in the bond market in 2020. This has driven leverage for investment-grade companies to an all-time high while simultaneously hindering companies' ability to pay for their debt. This has led to a record number of companies rated CCC- by S&P. However, major market players are still bullish on the corporate debt market next year due to the continued support of the Fed. Companies have taken advantage of the bullish run by selling debt at historically low borrowing costs. This has raised concerns that businesses have been left "comatose" on Fed's life-support. S&P 500's combined cash balance has risen to a record USD 3.4tn, an increase of USD 1.3tn from 2019 and more than 3x the level seen in 2008. Though the Fed's support is set to finish on Dec 31, 2020, many believe they will step into the market as they did in March. (FT)

US lenders score small business relief, accounting help in pandemic package

Dec 22. The recently passed pandemic relief program sought to avail USD 900bn worth of funding. This would help borrowers and, correspondingly, lenders. The banking sector can face over USD 300bn of non-performing loans by 2022. In response, the US lenders have lobbied to increase their acquired accounts and help their customers - this can be achieved via the simplified process for canceling PPP loans. Moreover, the program also simplified the tax return process for millions of borrowers. However, there remain several gaps to be bridged. In doing so, greater relief can be provided to communities and small businesses. (Reuters)

Canada waives CAD 844mn payment due on troubled hydroelectric plant project (Reuters)

China regulator approves opening of fifth nationwide bad loan bank (Reuters)

Finland plans to help Finnair with EUR 400mn loan (Reuters)

Regulatory Updates

Turkey raises interest rates again in bid to rebuild credibility

Dec 24. Turkey has raised interest rates for the second month in a row to rebuild credibility in its central bank. Naci Agbal, the new governor, has announced to lift its main interest rate from 15% to 17%. The increase in rates is higher than the median expectation of a 1.5 percentage point rise. Following the decision, the lira gained around 0.8%, reaching 7.57 TRY/USD. This monetary tightening was implemented to bring down inflation "as soon as possible", which is currently running at around 14% YoY as of November 2020. Though this tightening may not mirror other central banks' policies, it was necessary to put a backstop on the heavily depreciated lira, which almost pushed the country to a full-fledged financial crisis. This move is luring international investors who bought almost USD 4bn of Turkish stocks in the six weeks leading up to 18th Dec 2020. However, domestic investors' 'lack of confidence' in the domestic markets as high inflation, low deposit rates and currency volatility has seen a flight to foreign currency and gold. (FT)

China central bank to cool credit growth in 2021, avoid premature policy tightening

Dec 23. The Chinese central bank seeks to redraw fiscal and monetary support in 2021. The People's Bank of China is looking to maintain its benchmark lending rate in the near term with an ongoing agenda to pull back credit growth. However, the odds for a rise in rates are unlikely. The only case for that would be a significant uptick in inflation. In this year, the Chinese economy struggled to keep prices up. Moving into 2021, prices are expected to decline. Fiscally, Beijing is also likely to hold back on stimulus with the agenda to reduce the existing fiscal deficit – from the 2020 target of 3.6% of GDP to 3% in 2021. (Reuters)

China pushes Ant Group overhaul in latest crackdown on Ma (Reuters)

Money market funds need reform to prevent runs, US regulators say (FT)

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Contributing Editors: Emir Hrnjic, Anthony Prayugo